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| APPLICATION       | NO.                 | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|-------------------|---------------------|-------------|----------------------|-------------------------|------------------|
| 10/765,844        |                     | 01/29/2004  | Youji Terauchi       | 8022-1066               | 2342             |
| 466               | 7590                | 01/23/2006  |                      | EXAMINER                |                  |
| YOUNG             | G & THOM            | IPSON       | KIM, PAUL L          |                         |                  |
| 745 SOU<br>2ND FL | JTH 23RD S<br>OOR   | TREET       |                      | ART UNIT PAPER NUMBER   |                  |
|                   | ARLINGTON, VA 22202 |             |                      | 2857                    |                  |
|                   |                     |             |                      | DATE MAILED: 01/23/2006 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s)   |         |  |  |  |  |
|---|---|--|---------|--|--|--|--|
|   | 10/765,844  | TERAUCHI, YOUJI  | m       |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit   |         |  |  |  |  |
|   | Paul Kim  | 2857   |         |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply  | pears on the cover sheet with the o   | correspondence addres  | ·s      |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be the will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE | N. mely filed the mailing date of this commu ED (35 U.S.C. § 133). |         |  |  |  |  |
| Status  |   |  |         |  |  |  |  |
| Responsive to communication(s) filed on <u>22 S</u> This action is <b>FINAL</b> . 2b) ☐ This     Since this application is in condition for alloware closed in accordance with the practice under E   | action is non-final.  nce except for formal matters, pre  |  | rits is |  |  |  |  |
| Disposition of Claims   |   |  |         |  |  |  |  |
| 4)  Claim(s) 38-45 is/are pending in the applicatio 4a) Of the above claim(s) is/are withdray 5)  Claim(s) is/are allowed. 6)  Claim(s) 38 and 42-45 is/are rejected. 7)  Claim(s) 39-41 is/are objected to. 8)  Claim(s) are subject to restriction and/o Application Papers  9)  The specification is objected to by the Examine 10)  The drawing(s) filed on is/are: a)  accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)  The oath or declaration is objected to by the Examine  | wn from consideration.  or election requirement.  er.  epted or b) objected to by the drawing(s) be held in abeyance. Settion is required if the drawing(s) is of     | ee 37 CFR 1.85(a).<br>ojected to. See 37 CFR 1                     |         |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |         |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |   |  |         |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  | 4) Interview Summar<br>Paper No(s)/Mail I<br>5) Notice of Informal<br>6) Other:   |  | 2)      |  |  |  |  |

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 38 and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al.

With regard to claim 38, Lee et al teaches a testing circuit comprising: two or more block test units (fig. 4, parts 44-n), each of which compares a first data of *n* bits with a reference data of the *n* bits for each corresponding bit, and outputs a comparison result as a test circuit output signal, wherein the first data is outputted from corresponding one of m object circuits for a test (col. 7, lines 16-21); and a first logical processing unit which judges whether or not the all of m the test circuit output signals indicate that the first data is coincident with the reference data, and outputs a judgment result as a total judgment result signal based on the m test circuit output signals (fig. 4, part 110), wherein each of the m block test units includes: a block judging unit which compares the first data with the reference data for each corresponding bit to judge whether the first data is coincident with the reference data, and outputs a comparison result as a block judgment result signal (fig. 5, part XOR3-XOR6), and a block output selecting unit which outputs the block judgment result signal (fig. 5, part 42). Lee et al, however, does not teach an output control signal being used. Frame et al teaches a

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testing circuit in which testing units compare a first data with reference data and a comparison result is outputted based on a control signal (fig. 4A & col. 5, lines 52-61). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Lee et al, so that a control signal is used, as taught by Frame et al, in order to be able to increase system flexibility by being able to have more control over the final results.

With regard to claim 42, Lee et al teaches the total judgment result signal indicating all of m object circuits passing the test, in case that all of m test circuit output signal indicate that the first data is coincident with the reference data (col. 2, lines 41-45).

With regard to claim 43, Lee et al teaches the total judgment result signal indicating at least one of the m object circuits failing the test, in case that at least one of m the test circuit output signal indicates that the first data is not coincident with the reference data (col. 6, lines 51-55).

With regard to claim 44, Lee et al teaches the block judging unit includes: n individually judging units, each of which compares one of n bits of the first data with corresponding one of n bits of the reference data, and outputs a comparison result as a comparison result signal (fig. 5, part XOR3-XOR6); and a second logical processing unit which outputs the block judgment result signal indicating whether or not the first data is coincident with the reference data, based on a plurality of the comparison result signals supplied from the n individually judging units (fig. 5, part 42).

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With regard to claim 45, Lee et al teaches the block judgment result signal indicating that the first data is coincident with the reference data, in case that all of the comparison result signals indicate that the one of n bits of the first data is coincident with the corresponding one of n bits of the reference data (col. 2, lines 31-45).

## Allowable Subject Matter

3. Claims 39-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach an output control signal being set so that the block output selecting unit outputs one of a block judgment signal and standard signal.

#### Conclusion

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sellmair, Ohtomo, and Cole et al all teach a method for testing integrated circuits.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is 571-272-2217. The examiner can normally be reached on Monday-Thursday 10:00-6:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

PK January 9, 2006

> PATRICHASSOCIAS PALARITY EL CALLO